

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : X. Steve Yao REISSUE OF U.S. PATENT NO.
Serial No. : 5,978,125
Filed : Herewith
Title : COMPACT PROGRAMMABLE PHOTONIC VARIABLE DELAY DEVICES



Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants call attention to the attached Information
Disclosure Statement and documents listed on form PTO-1449.

This filing is being made with the filing of a Reissue
application. No fee is required.

The documents are in the English language; hence no concise
explanation is necessary per Rule 98(a)(3).

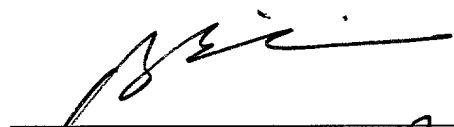
Please apply any additional charges or credits to Deposit
Account No. 06-1050 order no. 20985.

Consideration of the foregoing and enclosures plus the
return of a copy of the enclosed form PTO-1449 with the

Examiner's initials in the left column per MPEP 609 are earnestly solicited along with an early action on the merits.

Respectfully submitted,

Date: November 2, 2001



Scott C. Harris
Reg. No. 32,030

*Bring in
Reg. 43.312*

Fish & Richardson P.C.
PTO Customer No. 20985
4350 La Jolla Village Drive, Suite 500
San Diego, CA 92122
Telephone: (858) 678-5070
Facsimile: (858) 678-5099

10144366.doc

100545-4001

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 12361-014002	Application No.
Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant X. Steve Yao	
		Filing Date	Group Art Unit

(37 CFR §1.98(b))

10/005745
11/02/01

U.S. Patent Documents							
Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	3302028	1/1967	STERZER	359	256	
	AB	3684350	8/1972	WENTZ	359	256	
	AC	3719414	3/1973	WENTZ	359	256	
	AD	4461543	7/1984	McMAHON	359	320	
	AE	5251057	10/1993	GUERIN et al.	359	259	
	AF	5317445	5/1994	DeJULE et al.	359	250	
	AG	5373393	12/1994	DeJULE et al.	359	320	
	AH	5381250	1/1995	MEADOWS	359	39	
	AI	5475525	12/1995	TOURNOIS et al.	359	245	

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AJ							

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AK	E. Toughlian and H. Zmuda, "A photonic variable RF delay line for phased array antennas", J. Lightwave Technol., vol. 8, pp. 1824-828, 1990
	AL	E. Toughlian, H. Zmuda, and P. Kornreich, "A deformable mirror-based beamforming system for phased array antennas", IEEE Photonics Technology Letters, vol. 2, No. 6, pp. 444-446, 1990
	AM	C.T. Sullivan, S.D. Mukherjee, J.K. Hibbs-Brenner, and A. Gopinath, "Switched time-delay elements based on AlGaAs/GaAs optical wave-guide technology at 1.32 mm for optically controlled phased array antennas", SPIE Proceedings, vol. 1703, pp. 264-71, 1992
	AN	N.A. Riza, "Transmit/receive time-delay beam forming optical architecture for phased array antennas", Appl. Opt., vol. 30, pp. 4594-4595, 1991
	AO	A. Gutzoulis, K. Davis, P. Hrycak, and A. Johnson, "A hardware-compressive fiber-optic true time delay steering system for phased-array antennas", Microwave Journal, pp. 126-140, September 1994
	AP	R. Soref, "Programmable time-delay devices", Applied Optics, vol. 23, no. 21, pp. 3736-3739, 1984
	AQ	W. Ng, A. Walston, G. Tangonan, I. Newberg, and J.J. Lee, "Wideband fiber-optic network for phased array antenna steering", Electronics Letters, vol. 25, no. 21, pp. 1456-1457, 1989
	AR	D. Dolfi, F. Michel-Gabriel, S. Bann, and J.P. Huignard, "Two-dimensional optical architecture for time-delay beam forming in a phased-array antenna", Optics Letters, vol. 16, no. 4, pp. 255-157, 1991

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 12361-014002	Application No.
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant X. Steve Yao	
		Filing Date	Group Art Unit

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AS	B. Moslehi, K. Chau, and J. Goodman, "Fiber-optic signal processors with optical gain and reconfigurable weights", Proc. 4 th Biennial Department of Defense Fiber Optics and Photonics Conf., McLean, Virginia, pp. 303-309, 1994
	AT	D. Norton, S. Johns, and R. Soref, "Tunable wideband microwave transversal filter using high dispersive fiber delay lines", Proc. 4 th Biennial Department of Defense Fiber Optics and Photonics Conf., McLean, Virginia, pp. 297-301, 1994

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified) Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 12361-014002	Application No.
	Applicant X. Steve Yao		
	Filing Date	Group Art Unit	

Jc986 U.S. PTO
 10/005745
 11/02/01

U.S. Patent Documents							
Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	3302028	1/1967	STERZER	359	256	
	AB	3684350	8/1972	WENTZ	359	256	
	AC	3719414	3/1973	WENTZ	359	256	
	AD	4461543	7/1984	McMAHON	359	320	
	AE	5251057	10/1993	GUERIN et al.	359	259	
	AF	5317445	5/1994	DeJULE et al.	359	250	
	AG	5373393	12/1994	DeJULE et al.	359	320	
	AH	5381250	1/1995	MEADOWS	359	39	
	AI	5475525	12/1995	TOURNOIS et al.	359	245	

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AJ							

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AK	E. Toughlian and H. Zmuda, "A photonic variable RF delay line for phased array antennas", J. Lightwave Technol., vol. 8, pp. 1824-828, 1990
	AL	E. Toughlian, H. Zmuda, and P. Kornreich, "A deformable mirror-based beamforming system for phased array antennas", IEEE Photonics Technology letters, vol. 2, No. 6, pp. 444-446, 1990
	AM	C.T. Sullivan, S.D. Mukherjee, J.K. Hibbs-Brenner, and A. Gopinath, "Switched time-delay elements based on AlGaAs/GaAs optical wave-guide technology at 1.32 mm for optically controlled phased array antennas", SPIE Proceedings, vol. 1703, pp. 264-71, 1992
	AN	N.A. Riza, "Transmit/receive time-delay beam forming optical architecture for phased array antennas", Appl. Opt., vol. 30, pp. 4594-4595, 1991
	AO	A. Gutzoulis, K. Davis, P. Hrycak, and A. Johnson, "A hardware-compressive fiber-optic true time delay steering system for phased-array antennas", Microwave Journal, pp. 126-140, September 1994
	AP	R. Soref, "Programmable time-delay devices", Applied Optics, vol. 23, no. 21, pp. 3736-3739, 1984
	AQ	W. Ng, A. Walston, G. Tangonan, I. Newberg, and J.J. Lee, "Wideband fiber-optic network for phased array antenna steering", Electronics Letters, vol. 25, no. 21, pp. 1456-1457, 1989
	AR	D. Dolfi, F. Michel-Gabriel, S. Bann, and J.P. Huignard, "Two-dimensional optical architecture for time-delay beam forming in a phased-array antenna", Optics Letters, vol. 16, no. 4, pp. 255-157, 1991

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 12361-014002	Application No.
Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant X. Steve Yao	
		Filing Date	Group Art Unit
(37 CFR §1.98(b))			

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AS	B. Moslehi, K. Chau, and J. Goodman, "Fiber-optic signal processors with optical gain and reconfigurable weights", Proc. 4 th Biennial Department of Defense Fiber Optics and Photonics Conf., McLean, Virginia, pp. 303-309, 1994
	AT	D. Norton, S. Johns, and R. Soref, "Tunable wideband microwave transversal filter using high dispersive fiber delay lines", Proc. 4 th Biennial Department of Defense Fiber Optics and Photonics Conf., McLean, Virginia, pp. 297-301, 1994

10054545001

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	